

CLEAN VERSION OF REPLACEMENT CLAIMS

1. A system for detecting, monitoring and reporting human physiological information, comprising:

a sensor device adapted to be placed in contact with an individual's upper arm, said sensor device including at least two of an accelerometer, a GSR sensor and a heat flux sensor, said sensor device being adapted to generate: (i) data indicative of at least two of motion, the resistance of said individual's skin to electric current, and heat flow of said individual and (ii) derived data from at least a portion of said data indicative of at least two of motion, resistance of said individual's skin to electric current and heat flow, said derived data comprising a physiological parameter of said individual that cannot be wholly measured directly by any one of said accelerometer, said GSR sensor and said heat flux sensor,

a central monitoring unit remote from said sensor device adapted for the generation of analytical status data from at least a portion of at least one of: (i) said data indicative of at least two of motion, resistance of said individual's skin to electric current and heat flow, (ii) said derived data and (iii) said analytical status data, said central monitoring unit including a data storage device for retrievably storing at least one of: (i) said data indicative of at least two of motion, resistance of said individual's skin to electric current and heat flow, (ii) said derived data and (iii) said analytical status data;

data transfer means for establishing at least temporary electronic communication between said sensor device and said central monitoring unit; and

01 means for transmitting at least one of: (i) said data indicative of at least two of motion, resistance of said individual's skin to electric current and heat flow, (ii) said derived data and (iii) said analytical status data to a recipient.

198. A system according to claim 1, wherein said central monitoring unit is adapted to generate derived data from at least a portion of said data indicative of at least two of motion, resistance of said individual's skin to electric current and heat flow.

02 46 A system according to claim 1, wherein said data indicative of at least two of motion, resistance of said individual's skin to electric current and heat flow comprises a summary over a period of time.

24 10. A system according to claim 1, wherein said sensor device further comprises a memory for storing said data indicative of at least two of motion, resistance of said individual's skin to electric current and heat flow and said derived data.

125 11. A system according to claim 1, wherein said central monitoring unit is adapted to generate one or more web pages containing at least one of said data indicative of at least two of motion, resistance of said individual's skin to electric current and heat flow, said derived data, and said analytical status data, and wherein said means for transmitting makes said web pages accessible by said recipient over the Internet.

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12. A system according to claim 8, wherein said central monitoring unit is adapted to generate one or more web pages containing at least one of said data indicative of at least two of motion, resistance of said individual's skin to electric current and heat flow, said derived data, and said analytical status data, and wherein said means for transmitting makes said web pages accessible by said recipient over the Internet.

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13. A system according to claim 1, wherein said means for transmitting transmits said at least one of said data indicative of at least two of motion, resistance of said individual's skin to electric current and heat flow, said derived data, and said analytical status data to said recipient over an electronic network.

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14. A system according to claim 1, wherein said means for transmitting transmits said at least one of said data indicative of at least two of motion, resistance of said individual's skin to electric current and heat flow, said derived data, and said analytical status data to said recipient in physical form.

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15. A system according to claim 1, wherein said derived data comprises calories burned and is based on said data indicative of motion and said data indicative of heat flow

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16. A system according to claim 40, wherein said derived data is also based on said data indicative of resistance of said individual's skin to electric current.

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43. (Amended) A system according to claim 8, wherein said derived data comprises calories burned and is based on said data indicative of motion and said data indicative of heat flow.

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44. A system according to claim 43, wherein said derived data is also based on said data indicative of resistance of said individual's skin to electric current.

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45. A sensor device adapted to be placed in contact with an individual's upper arm, comprising:

at least two of an accelerometer adapted to generate data indicative of motion, a GSR sensor adapted to generate data indicative of the resistance of said individual's skin to electric current and a heat flux sensor adapted to generate data indicative of heat flow;

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a processor coupled to said at least two of an accelerometer, a GSR sensor and a heat flux sensor, said processor being adapted to generate derived data from at least a portion of at least two of said data indicative of motion, resistance of said individual's skin to electric current and heat flow, said derived data comprising a physiological parameter of said individual that cannot be wholly measured directly by any one of said accelerometer, said GSR sensor and said heat flux sensor;

means for inputting and outputting data from said sensor device;

a computer housing for containing said processor; and

a flexible wing body having first and second wings, said first and second wings being adapted to wrap around a portion of said upper arm.

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99 A sensor device according to claim 95, wherein said derived data comprises
calories burned and is based on said data indicative of motion and said data indicative of heat
flow.
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100 A sensor device according to claim 99, wherein said derived data is also based on
said data indicative of resistance of said individual's skin to electric current.